ABSTRACT

PROCESS TO MAKE A CONDUCTIVE COMPOSITION OF A FLUORINATED POLYMER WHICH CONTAINS POLYANILINE

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The process of the present invention is a process to make a conductive fluorinated polymer composition (also called composite) wherein:

- a) an aqueous solution of an anilinium salt is mixed with an aqueous dispersion of a fluorinated polymer,
- 10 b) then an oxidant is added to the mixture of step a) to make a blend of said fluorinated polymer and doped polyaniline (PANI),
 - c) by-products and unreacted aniline are removed by washing with water or an alcohol to get a blend of purified fluorinated polymer and doped PANI,
 - d) eventually the purified fluorinated polymer and doped PANI of step c) can be mixed with an acid,
 - e) water is removed from the purified fluorinated polymer and doped PANI of step c) or d) if any and the remaining powder is melted and shaped in films, pellets or any object.